



# **MALAYSIAN STANDARD**

**MS 1462-3-2:2021**

## **Metal scaffolding – Part 3: Prefabricated scaffoldings – Section 2: Particular methods of structural design for steel and aluminium modular system scaffoldings (First revision)**

**ICS: 91.220**

Descriptors: scaffolds, facades, scaffolding components, prefabricated parts, construction equipment, structural design, mathematical calculations, structural systems, loading, verification, mechanical testing

**FOR SALE WITHIN MALAYSIA ONLY**

**© Copyright 2021**

**DEPARTMENT OF STANDARDS MALAYSIA**

## DEVELOPMENT OF MALAYSIAN STANDARDS

The **Department of Standards Malaysia (Standards Malaysia)** is the national standards and accreditation body of Malaysia.

The main function of Standards Malaysia is to foster and promote standards, standardisation and accreditation as a means of advancing the national economy, promoting industrial efficiency and development, benefiting the health and safety of the public, protecting the consumers, facilitating domestic and international trade and furthering international cooperation in relation to standards and standardisation.

Malaysian Standards (MS) are developed through consensus by committees which comprise balanced representation of producers, users, consumers and others with relevant interests, as may be appropriate to the subject at hand. To the greatest extent possible, Malaysian Standards are aligned to or are adoption of international standards. Approval of a standard as a Malaysian Standard is governed by the Standards of Malaysia Act 1996 [Act 549]. Malaysian Standards are reviewed periodically. The use of Malaysian Standards is voluntary except in so far as they are made mandatory by regulatory authorities by means of regulations, local by-laws or any other similar ways.

For further information on Malaysian Standards, please contact:

**Department of Standards Malaysia**  
Level 4 – 7, Tower 2, Menara Cyber Axis  
Jalan Impact, Cyber 6  
63000 Cyberjaya  
Selangor Darul Ehsan  
MALAYSIA

Tel: 60 3 8008 2900  
Fax: 60 3 8008 2901  
<http://www.jsm.gov.my>  
E-mail: [central@jsm.gov.my](mailto:central@jsm.gov.my)

## **Committee representation**

The National Standards Committee on Building, Construction and Civil Engineering (NSC D) under whose authority this Malaysian Standard was developed, comprises representatives from the following organisations:

Association of Consulting Engineers Malaysia  
Construction Industry Development Board Malaysia  
Department of Irrigation and Drainage Malaysia  
Department of Standards Malaysia (Secretariat)  
Federation of Malaysian Manufacturers  
Jabatan Bomba dan Penyelamat Malaysia  
Jabatan Kerajaan Tempatan  
Jabatan Kerja Raya  
Malaysian Iron and Steel Industry Federation  
Malaysian Timber Industry Board  
Master Builders Association Malaysia  
Pertubuhan Akitek Malaysia  
Pertubuhan Perancang Malaysia  
Projek Lebuhraya Usahasama Berhad  
Real Estate and Housing Developers' Association Malaysia  
Suruhanjaya Perkhidmatan Air Negara  
The Cement and Concrete Association of Malaysia  
The Institution of Engineers, Malaysia  
Universiti Putra Malaysia  
Universiti Sains Malaysia  
Universiti Teknologi Malaysia

The Technical Committee on Steel Products (TC/D/4) which supervised this Malaysian Standard consists of representatives from the following organisations:

Construction Industry Development Board Malaysia  
Department of Occupational Safety and Health Malaysia  
Department of Standards Malaysia (Secretariat)  
Malaysian Iron and Steel Industry Federation  
Malaysia Steel Association  
Malaysian Structural Steel Association  
Master Builders Association Malaysia  
SIRIM QAS International Sdn Bhd  
The Institution of Engineers, Malaysia  
Universiti Malaya  
Universiti Teknologi Malaysia  
Universiti Teknologi MARA

The Working Group on Tubular and Prefabricated Scaffolding (WG/D/4-3) which developed this Malaysian Standard consists of representatives from the following organisations:

Aerial Global Sdn. Bhd  
Construction Industry Development Board Malaysia  
Construction Research Institute of Malaysia  
Department of Occupational Safety and Health Malaysia  
Department of Standards Malaysia (Secretariat)  
Jabatan Kerja Raya Malaysia  
Leform Sdn Bhd  
SIRIM QAS International Sdn Bhd  
Southern Pipe Industry (M) Sdn Bhd  
SUMI-Tech Industrial Supplies Sdn Bhd  
Universiti Teknologi MARA

# MS 1462-3-2:2021

## National foreword

The adoption of the EN Standard as a Malaysian Standard was recommended by the Working Group on Tubular and Prefabricated Scaffolding under the authority of the National Standards Committee on Building, Construction and Civil Engineering.

This Malaysian Standard is identical with EN 12810-2:2003, *Façade scaffolds made of prefabricated components - Part 2: Particular methods of structural design*, published by the European Committee for Standardization (CEN) with the exceptions as listed below.

### MALAYSIAN STANDARD EXCEPTIONS

- a) in the source text, "this European Standard" should read "this Malaysian Standard";
- b) the comma which is used as a decimal sign (if any), to read as a point;
- c) drop tests for platforms and their supports as stated in Annex B is compulsory;
- d) incorporation of National Annex A on "Commentary on MS 1462-3-2";
- e) Figure 7, clause 4.4.2 and Figure 8 and 9, clause 4.4.3 are replaced as below:

Clause	EN 12810-2	MS 1462-3-2	Notes
4.4.2	Figure 7	Figure NA.1	Minimum height measured from load cell to support shall be 5 m
4.4.3	Figure 8	Figure NA.2	
4.4.3	Figure 9	Figure NA.3	

- f) Annex A is not applicable in Malaysia;
- g) requirement of vibration test – National Annex NA15 and methodology of test;
- h) reference to European Standards should be replaced by corresponding Malaysian Standards as follows:

#### Referenced European Standards

EN 12810-1, *Façade scaffolds made of prefabricated components - Part 1: Product specifications*

EN 12811-1, *Temporary works equipment - Part 1: Scaffolds - Performance requirements and general design*

EN 12811-2, *Temporary works equipment - Part 2: Information on materials*

#### Corresponding Malaysian Standards

MS 1462-3-1, *Metal Scaffolding - Part 3: Prefabricated scaffolds - Section 1: Specification for steel and aluminium modular system scaffolding*

MS 1462-4-1, *Metal Scaffolding - Part 4: Temporary Works Equipment - Section 1: Performance Requirements and General Design*

MS 1462-4-2, *Metal Scaffolding - Part 4: Temporary Works Equipment - Section 2: Information of Materials\**

**National foreword (*continued*)**

EN 12811-3, *Temporary works equipment - Part 3: Load Testing*

MS 1462-4-3, *Metal Scaffolding - Part 4: Temporary Works Equipment - Section 3: Load Testing\**

This Malaysian Standard consists of the following parts, under the general title *Metal Scaffolding*:

*Part 1: Prefabricated scaffolds - specification for steel frame scaffolding*

*Part 2: Tubular (tube and coupler) scaffolds - Section 1: Specification for steel tubes*

*Part 2: Tubular (tube and coupler) scaffolds - Section 2: Specification for aluminium tubes*

*Part 2: Tubular (tube and coupler) scaffolds - Section 3: Specification for steel and aluminium couplers, fitting and accessories*

*Part 3: Prefabricated scaffolds - Section 1: Specification for steel and aluminium modular system scaffolding*

*Part 3: Prefabricated scaffolds - Section 2: Particular methods of structural design for steel and aluminium modular system scaffolding*

*Part 4: Temporary works equipment - Section 1: Performance requirements and general design\**

*Part 4: Temporary works equipment - Section 2: Information of materials\**

*Part 4: Temporary works equipment - Section 3: Load testing\**

*Part 5: Mobile access and working tower made of prefabricated elements - Materials, dimensions, design loads, safety and performance requirements\**

*Part 6: Temporarily installed suspended scaffolds and access equipment\**

This Malaysian Standard cancels and replaces MS 1462-3-2:2012, *Metal scaffolding - Part 3: Prefabricated scaffoldings - Section 2: Particular methods of structural design for steel and aluminium modular system scaffoldings*.

This standard is published with the permission of the European Committee for Standardization. Such permission is hereby acknowledged.

Compliance with a Malaysian Standard does not of itself confer immunity from legal obligations.

---

\*Under deliberation.